

FIG. 1

1	CTTTCAGTCAGCATGATAAGAAACATACAGCAACCTTCCCCCAGATCCGTGGCAACTGGACTTCCAGCG	69
19	MetIleGluThrTyrSerGlnProSerProArgSerValAlaThrGlyLeuProAla	19
70	AGCATGAAGATTTTATGTATTTACTTACTGTTTTCCTTATCACCACCAATGATTGGATCTGTGCTTTT	138
20	SerMetLysIlePheMetTyrLeuLeuThrValPheLeuIleThrGlnMetIleGlySerValLeuPhe	42
139	GCTGTGTATCTTCATAGAAAGATTGGATAAGGTCGAAGAGGAAGTAAACCTTCATGAAGATTTTGTATTC	207
43	AlaValTyrLeuHisArgArgLeuAspLysValGluGluValAlaAsnLeuHisGluAspPheValPhe	65
208	ATAAAAAAGCTAAAGAGATGCAACAAAGAGAAAGGATCTTTATCCTTGTCTGAACCTGTGAGGAGATGAGA	276
66	IleLysLysLeuLysArgCysAsnLysGlyGluGlySerLeuSerLeuLeuAsnCysGluGluMetArg	88
277	AGGCAATTTGAAGACCTTGTCAAGGATATAACGTTAAACAAGAGAGAAAAAGAAACAGCTTTTGAA	345
89	ArgGlnPheGluAspLeuValLysAspIleThrLeuAsnLysGluGluLysLysGluAsnSerPheGlu	111
346	ATGCAAAAGAGGTGATGAGGATCCTCAAATTCACAGCACACGTTGTAAAGCGAAGCCAAACAGTAATGCAGCA	414
112	MetGlnArgGlyAspGluAspProGlnIleAlaAlaHisValSerGluAlaAsnSerAsnAlaAla	134
415	TCCGTTCTACAGTGGGCCAAGAAAGGATATTATACCATGAAAAGCAACTTGGTAATGCTTGAAAATGGG	483
135	SerValLeuGlnTrpAlaLysLysGlyTyrTyrThrMetLysSerAsnLeuValMetLeuGluAsnGly	157
484	AAACAGCTGACGGTTAAAAGAGAAAGGACTCTATTATGTCTACACTCAAGTCACCTTCTGCTCTAATCGG	552
158	LysGlnLeuThrValLysArgGluGlyLeuTyrTyrValTyrThrGlnValThrPheCysSerAsnArg	180
553	GAGCCTTCGAGTCAACGCCCATTCATCTCGGCGCTCTGGCTGAAGCCCCAGCAGTGGATCTGAGAGAATC	621
181	GluProSerSerGlnArgProPheIleValGlyLeuTrpLeuLysProSerSerGlySerGluArgIle	203
622	TTACTCAAGCGCGCAATAACCCACAGTTCTCCAGCTTTGCGAGCAGCAGTCTGTTCACTTGGCGCGGA	690
204	LeuLeuLysAlaAlaAsnThrHisSerSerSerGlnLeuLeuCysGluGlnGlnSerValHisLeuGlyGly	226

*FIG. 1, continued*

691	GTGTTTGAATTACAAAGCTGGTGCTTCTGTGTTTGTCAACGTGACTGAAGCAAGCCAAAGTGATCCACAGA	759
227	ValPheGluLeuGlnAlaSerValPheValAsnValThrGluAlaSerGlnValIleHisArg	249
760	GTTGGCTTCTCATCTTTTGGCTTACTCAAACAGTGCGCTGCCCTAGGCTGCAGCAGGGCTGA	828
250	ValGlyPheSerSerPheGlyLeuLeuLysLeu	260
829	TGCTGGCAGTCTCCCCCTATACACCAAGTCAGTTAGGCCCTCCCCCTGTGTGAACTGCCCTATTATAACC	897
898	CTAGGATCCTCCTCATGGAGAACTATTATTATGTACCCCCCAAGGCACATAGAGCTGGAATAAGAGAAT	966
967	TACAGGGCAGGCAAAAATCCCAAGGACCCCTGCTCCCTAAGAACTTACAATCTGAAACAGCAACCCAC	1035
1036	TGATTCAGACAACCAAGAAAGACAAAGCCATAATACACAGATGACAGAGCTCTGATGAACAACAGATA	1104
1105	ACTAATGAGCACAGTTTGTGTTTATGGGTGTGTCGTTCAATGGACAGTGTACTTGACTTACCAGGG	1173
1174	AAGATGCAGAAGGCAACTGTGAGCCTCAGCTCACAAATCTGTTTATGTTGACCTGGGCTCCCTGCGGCC	1242
1243	CTAGTAGG	1250

FIG. 2

1	TGCCACCTTCTCTGCCAGAAATACCATTTCAACTTTAACACAGCATGATCGAAACATACACCAAAC	69
1	MetIleGluThrTyrAsnGlnThr	8
70	TCTCCCCGATCTGGGCCACTGGACTGCCCATCAGCATGAAATTTTTATGTATTACTTACTGTTTT	138
9	SerProArgSerAlaAlaThrGlyLeuProIleSerMetLysIlePheMetTyrLeuLeuThrValPhe	31
139	CTTATCACCCAGATGATGGGTGAGCAGCTTTTGTGTGTATCTTCATAGAAAGTTGGACAGATAGAA	207
32	LeuIleThrGlnMetIleGlySerAlaLeuPheAlaValTyrLeuHisArgArgLeuAspLysIleGlu	54
208	GATGAAAGGAATCTTCATGAAGATTTTGTATTTCATGAAAACGATACAGAGATGCAACACAGGAGAAAGA	276
55	AspGluArgAsnLeuHisGluAspPheValPheMetLysThrIleGlnArgCysAsnThrGlyGluArg	77
277	TCCTTATCCTTACTGAACCTGTGAGGAGATTAAAGCCAGTTTGAAGGCTTTGTGAAGGATATAATGTTA	345
78	SerLeuSerLeuLeuAsnCysGluGluIleLysSerGlnPheGluGlyPheValLysAspIleMetLeu	100
346	AACAAAGAGGAGACGAAGAAAGAAACAGCTTTGAAATGCCAAAAGGTGATCAGAATCCTCAAATTGCG	414
101	AsnLysGluGluThrLysLysLysGluAsnSerPheGluMetGlnLysGlyAspGlnAsnProGlnIleAla	123
415	GCACATGTCATAAGTGAGGCCAGCAGTAAACAACATCTGTGTACAGTGGGCTGAAAAAGGATACTAC	483
124	AlaHisValIleSerGluAlaSerSerLysThrThrSerValLeuGlnTrpAlaGluLysGlyTyrTyr	146
484	ACCATGAGCAACAACCTTGTTAACCTGGAAAATGGGAAACAGCTGACCGTTAAAAGACACAGGACTCTAT	552
147	ThrMetSerAsnAsnLeuValThrLeuGluAsnGlyLysGlnLeuThrValLysArgGlnGlyLeuTyr	169
553	TATATCTATGCCCAAGTCACCTTCTGTTCCTCAATCGGGAAGCTTCGAGTCAAGCTCCATTTATAGCCAGC	621
170	TyrIleTyrAlaGlnValThrPheCysSerAsnArgGluAlaSerSerGlnAlaProPheIleAlaSer	192
622	CTCTGCCTAAAGTCCCCGGTAGATTCGAGAGAAATCTTACTCAGAGCTGCAATACCCACAGTTCGCGC	690
193	LeuCysLeuLysSerProGlyArgPheGluArgIleLeuLeuArgAlaAlaAsnThrHisSerSerAla	215

FIG. 2, continued

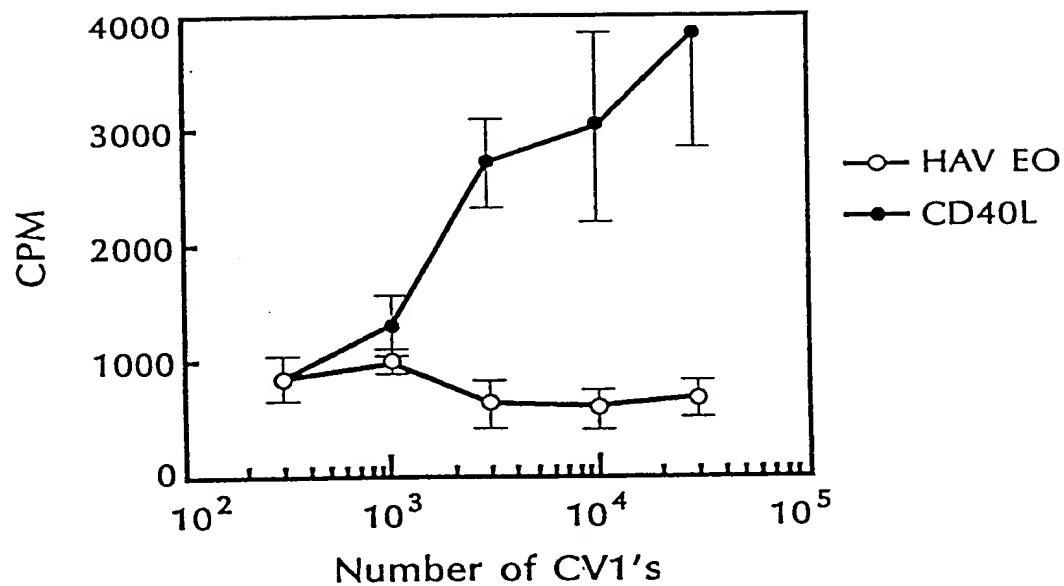
691	AAACCTTGGGGCAACAATCCATTCACTTGGGAGGAGTATTTGAATTGCAACCAGGTGCTTCGGTGTTT	759
216	LysProCysGlyGlnGlnSerIleHisLeuGlyGlyValPheGluLeuGlnProGlyAlaSerValPhe	238
760	GTCAATGTGACTGATCCAAGCCCAAGTGAGCCATGGCACTGGCTTCACGTCCTTTGGCTTACTCAAACCTC	828
239	ValAsnValThrAspProSerGlnValSerHisGlyThrGlyPheThrSerPheGlyLeuLeuLysLeu	261
829	TGAACAGTGTACCTTGCAGGCTGTGGTGGAGCTGACCGCTGGGAGTCTTCATAATACAGCACAGCGGTT	897
898	AAGCCCAACCCCTGTTAACTGCCCTATTTATAACCCCTAGGATCCTCCTTATGGAGAACTATTAT	961

FIG. 3

251	TGFTSFGLKL	261
	.   .	
254	VGFSSTFGLKL	264

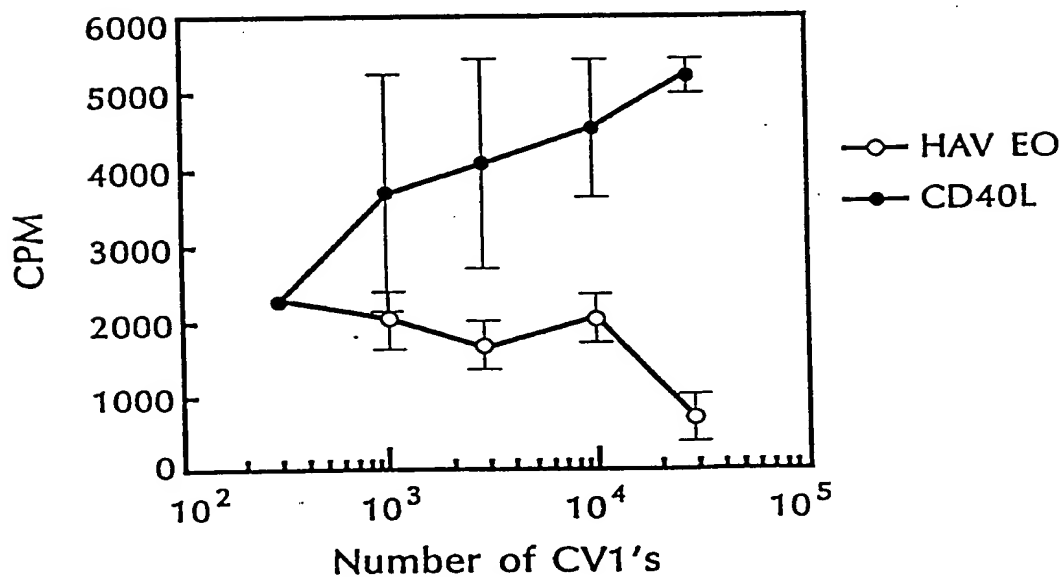
**FIG. 4A**

10E5 E- + CV1's



**FIG. 4B**

10E5 E- + IL-4 + CV1's



*FIG. 5*

PB E + IL-4 + CV1 d7 Proliferation

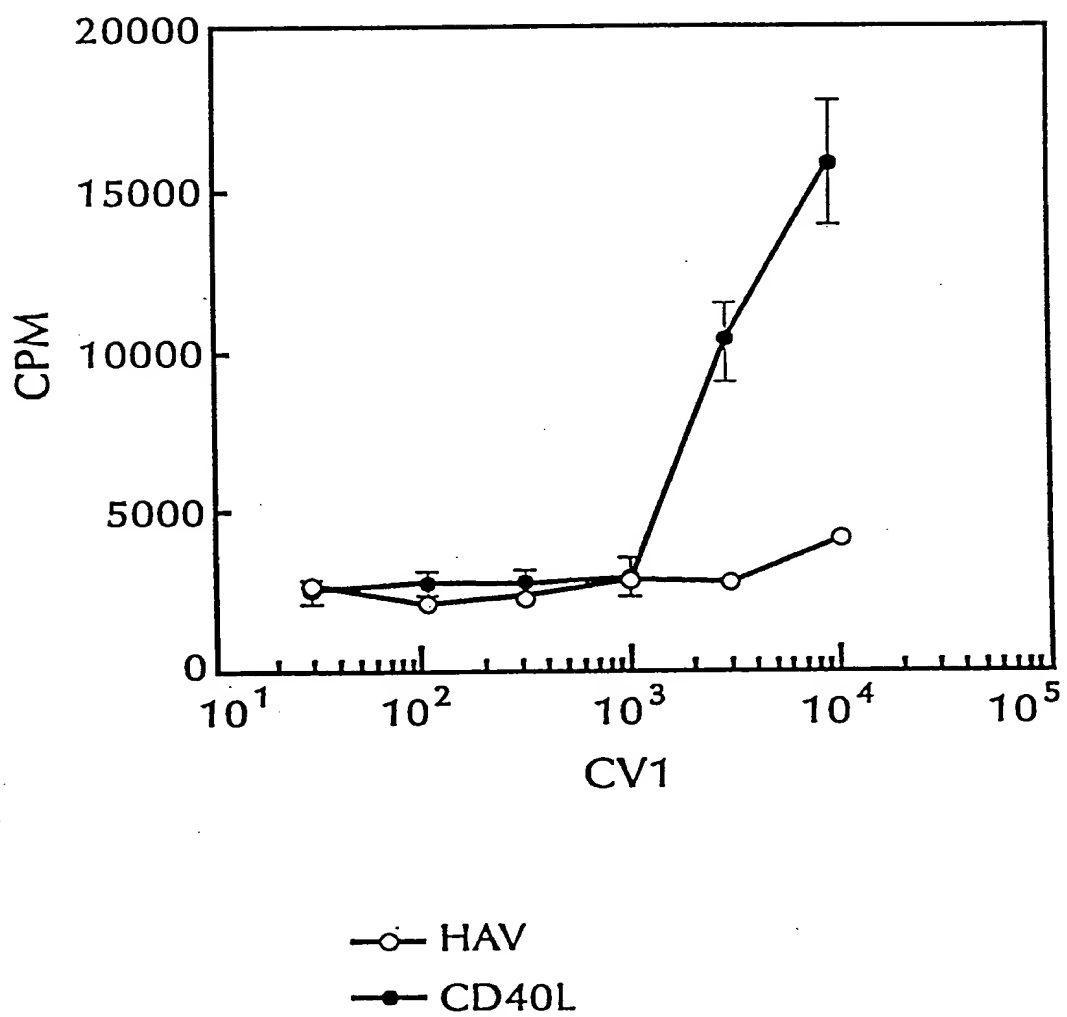


FIG. 6

S.CD23 in Day 6 Cultures S/N:  
10E5 E-/Well, IMDM + IL-4

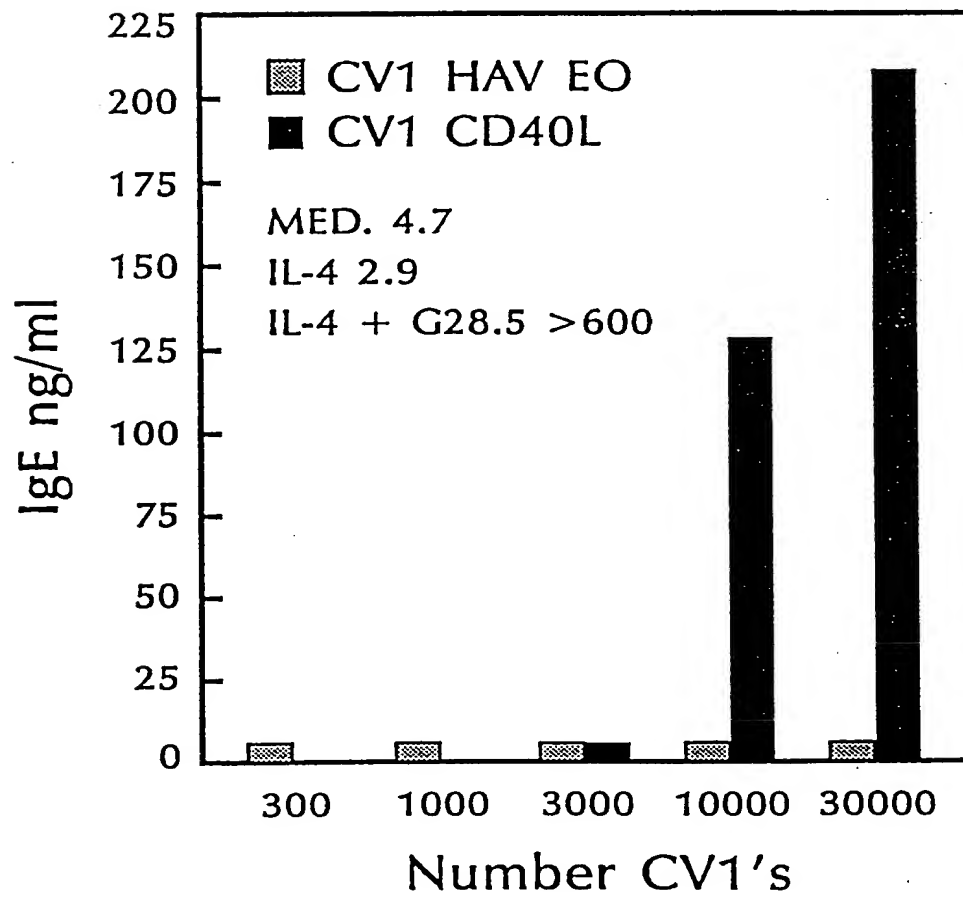




FIG. 7

S.CD23 in Day 6 Cultures S/N:  
10E5 E-/Well, IMDM + IL-4

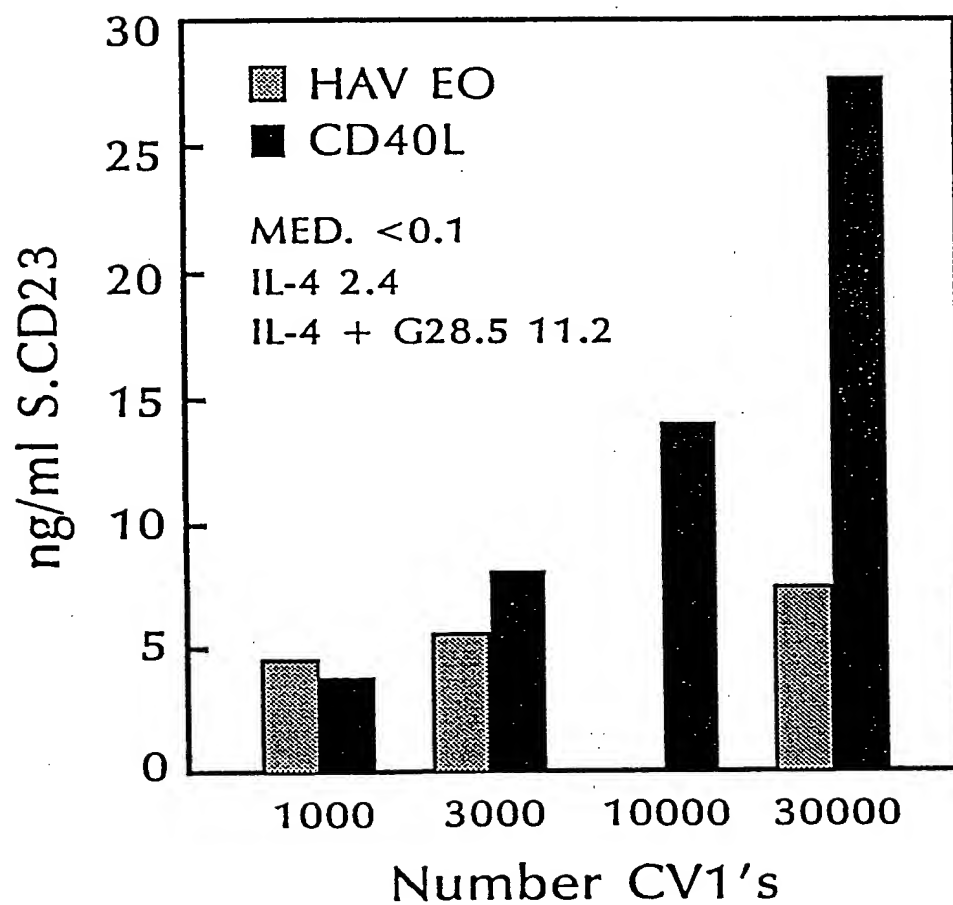
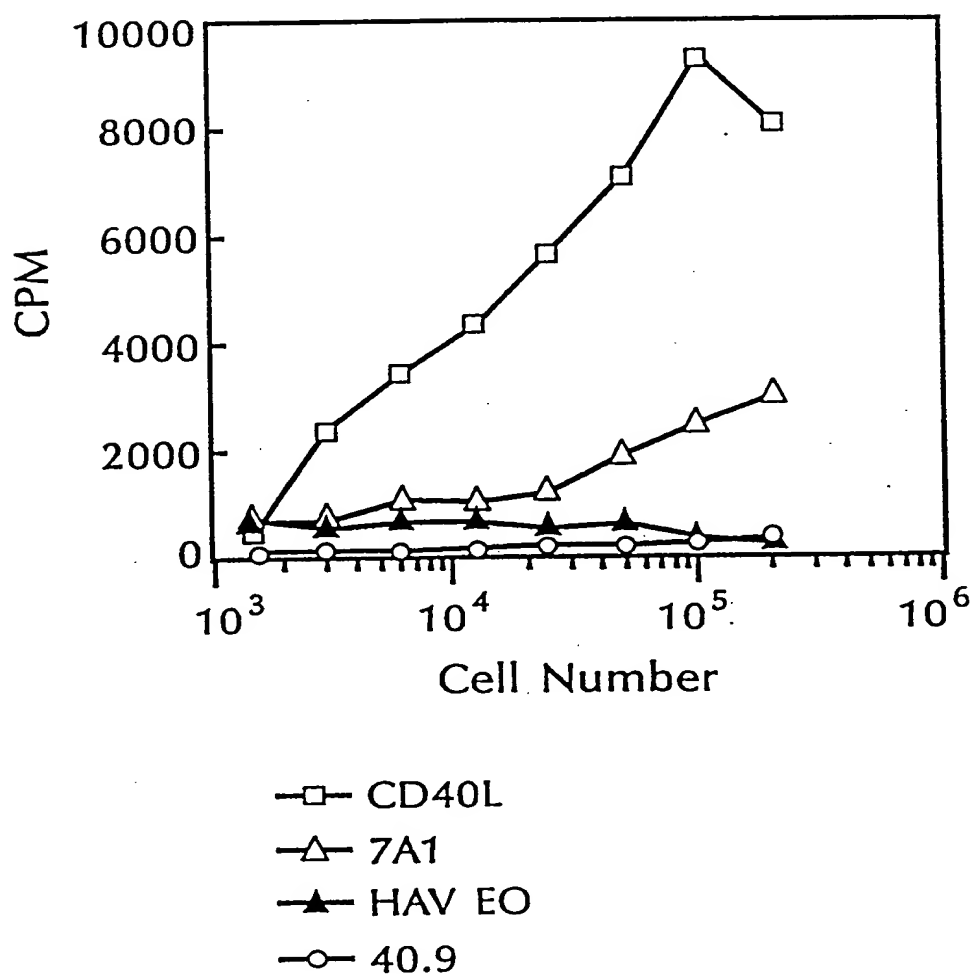


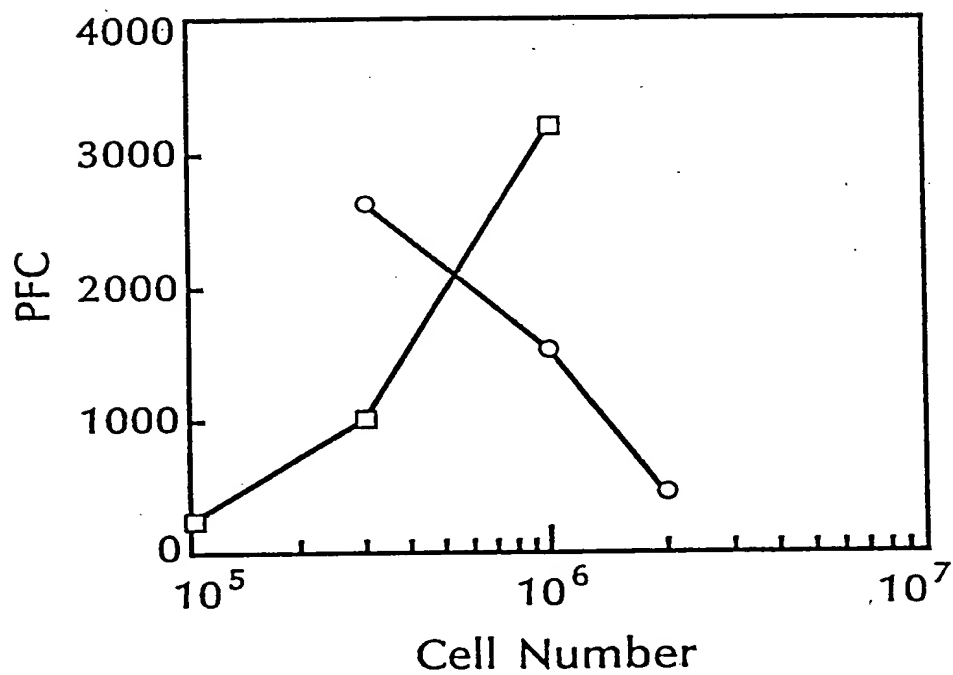
FIG. 8

Induction of B Cell Proliferation by  
CD40 Ligand Expressing CV-1 Cells (fixed)



*FIG. 9*

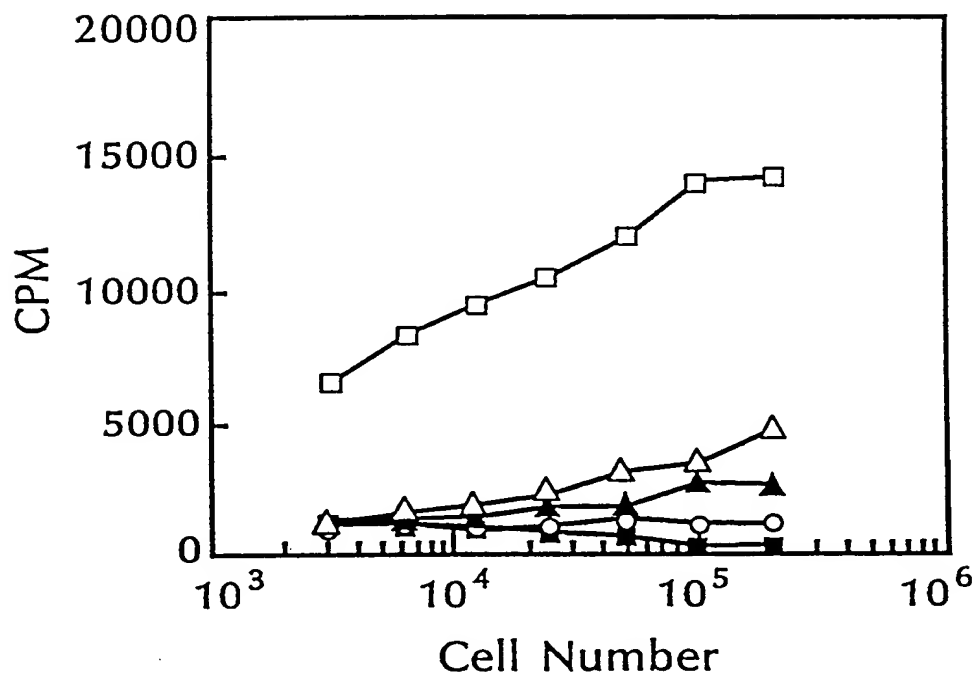
Induction of Anti-SRBC PFC by EL4 40.9  
and 7A1 Th1 Cells (Fixed)



—□— 7A1  
—○— 40.9

*FIG. 10*

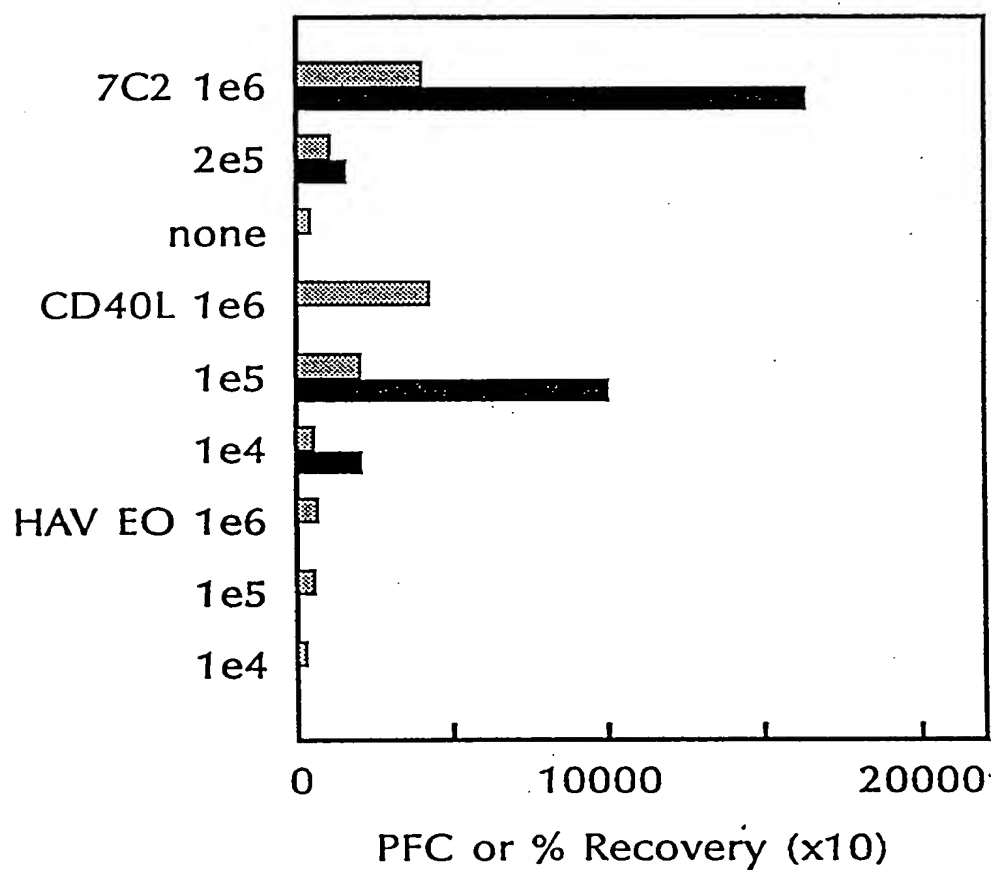
Induction of B Cell Proliferation by  
CD40 Ligand Expressing CV-1 Cells



- CD40L
- △— 7A1
- HAV EO
- ▲— 7A1 + CD40Fc
- CD40Fc

FIG. 11

Induction of Anti-SRBC PFC by CD40  
Ligand Expressing CV-1 Cells (fixed)



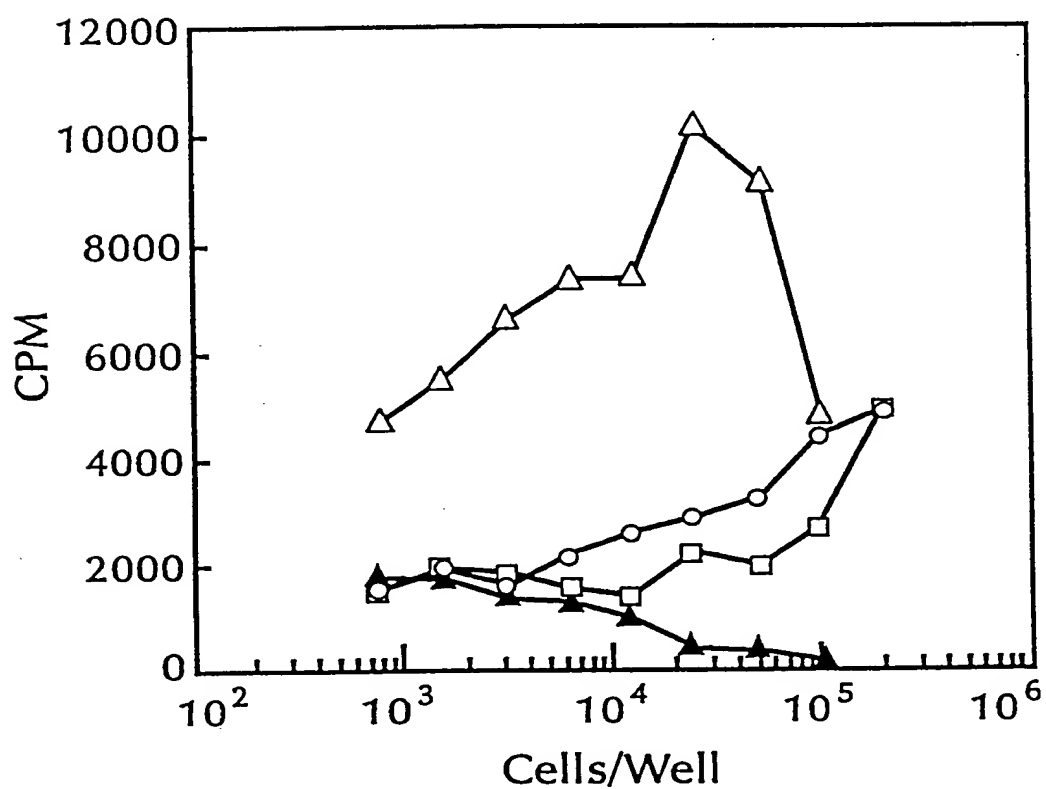
▨ % Recovery

■ PFC

3194-11

*FIG. 12*

Induction of Murine B Cell Proliferation by  
CD40 Ligand Expressing CV-1 Cels (fixed)



- △— CD40L
- ▲— HAV EO
- 7C2 11/6
- 7A1 11/6

INDUCTION OF ANTIGEN SPECIFIC PFC BY  
CD40 LIGAND EXPRESSING CV-1 CELLS (FIXED)

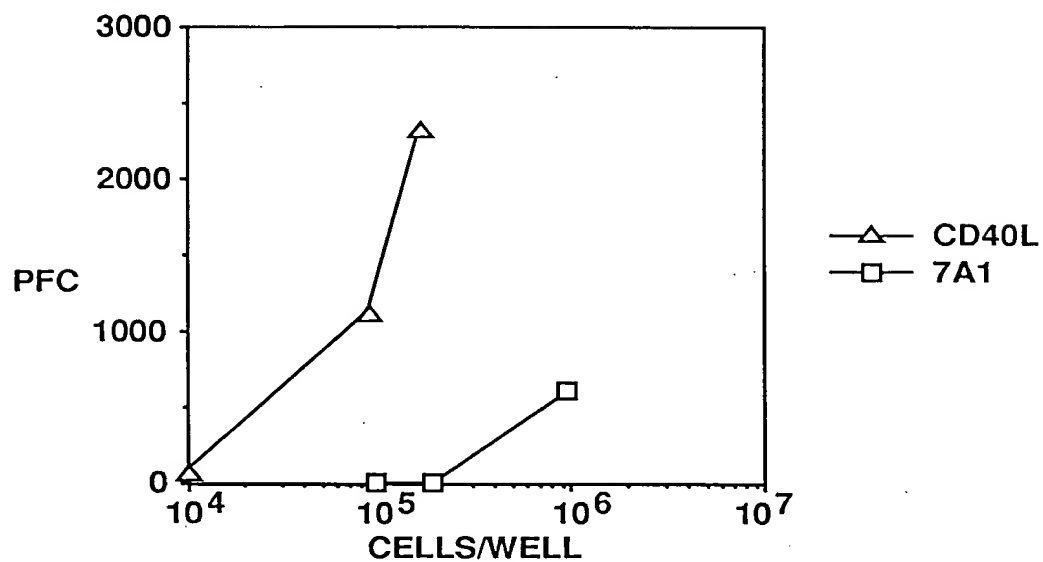


FIG. 13A

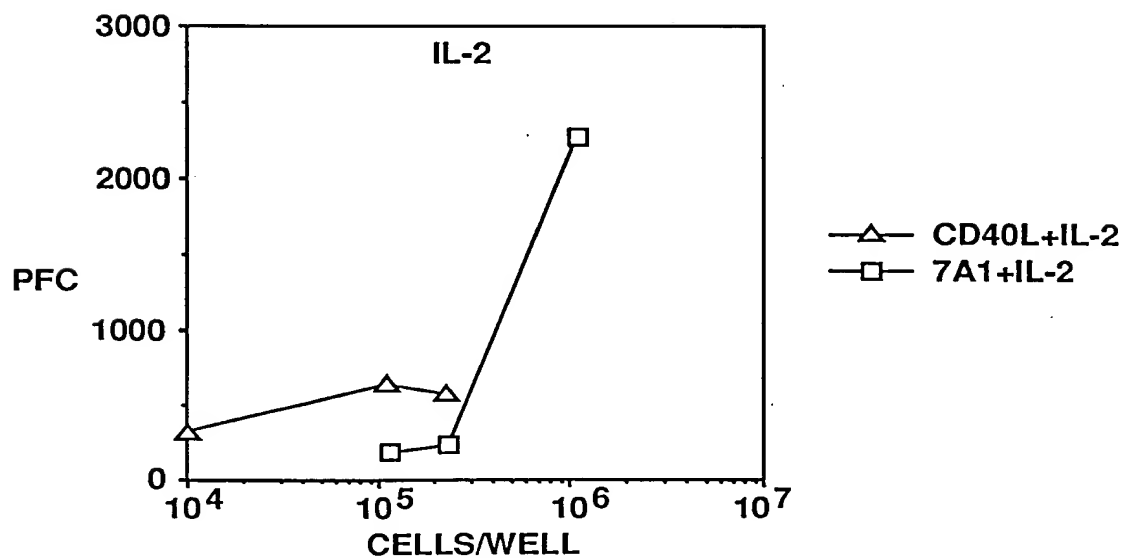
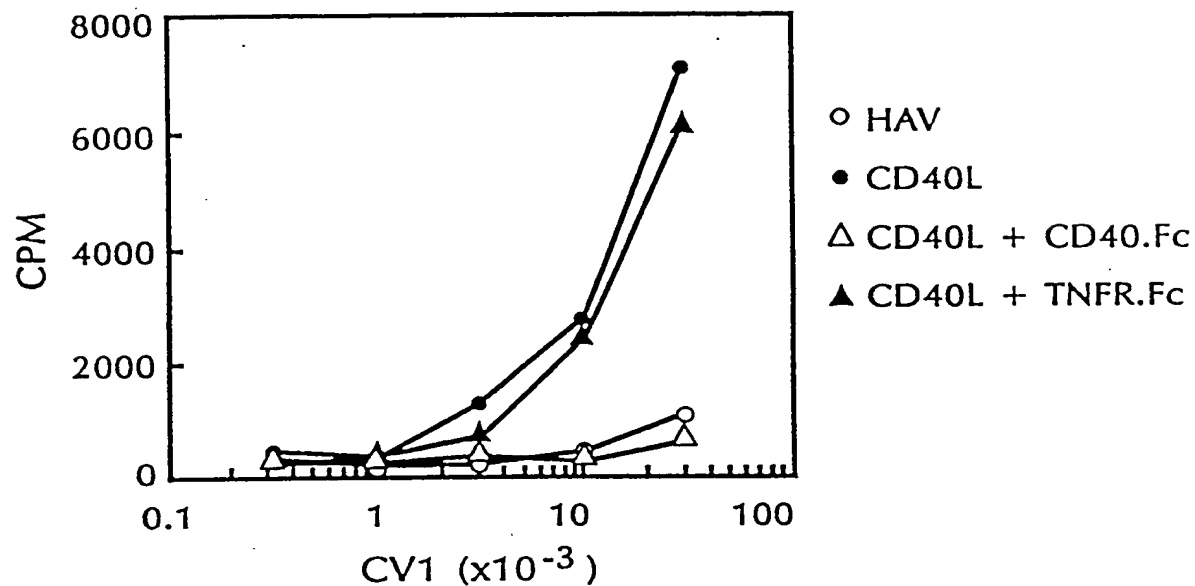


FIG. 13B

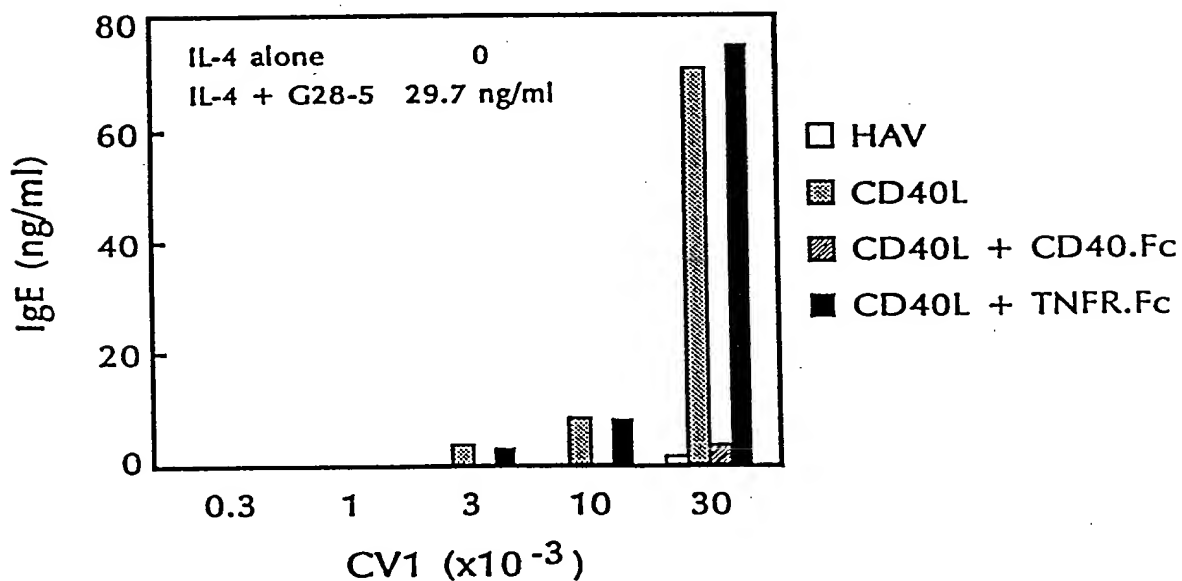
**FIG. 14A**

Day 7 Proliferation of T-depleted PBM



**FIG. 14B**

Day 10 IgE Secretion from T-depleted PBM









Inhibition of anti-IgM + soluble CD40L-induced  
B-cell proliferation by anti-hCD40L mAb

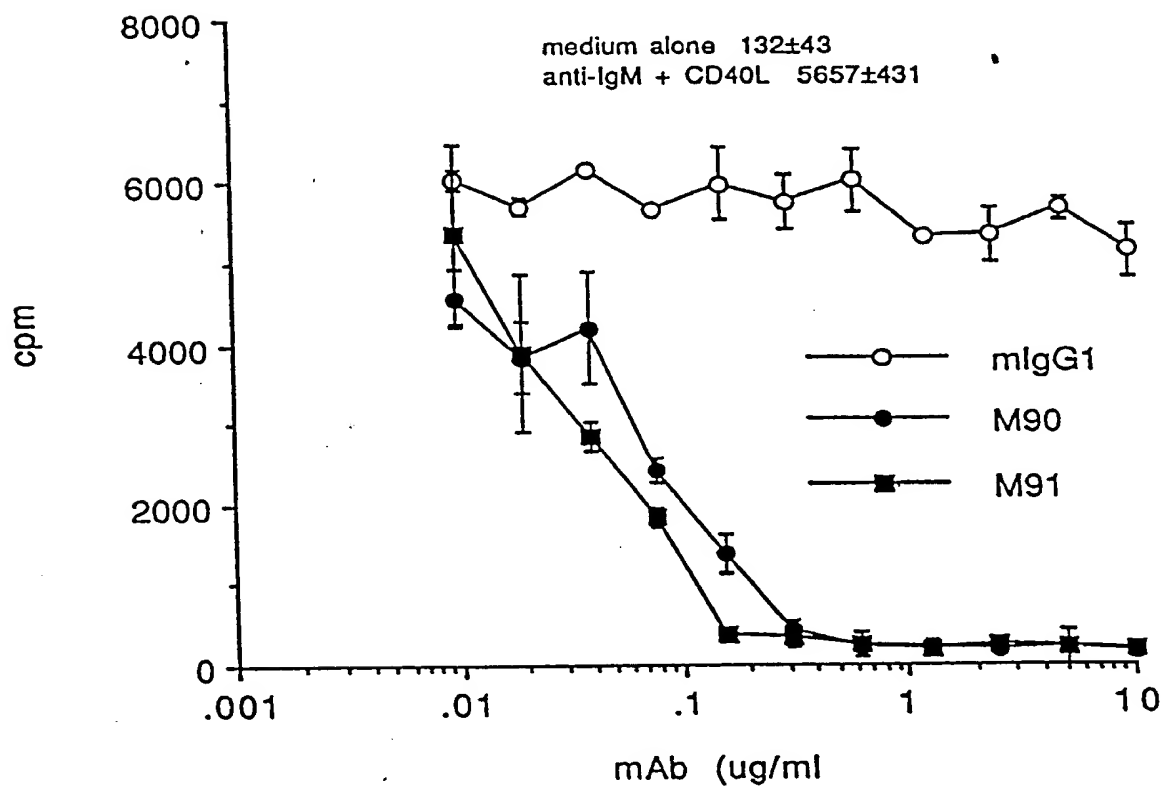


FIG. 17

Binding of human and Murine CD40 LT and CD40 L Fc  
Dimer to CD40Fc by Biosensor Assay

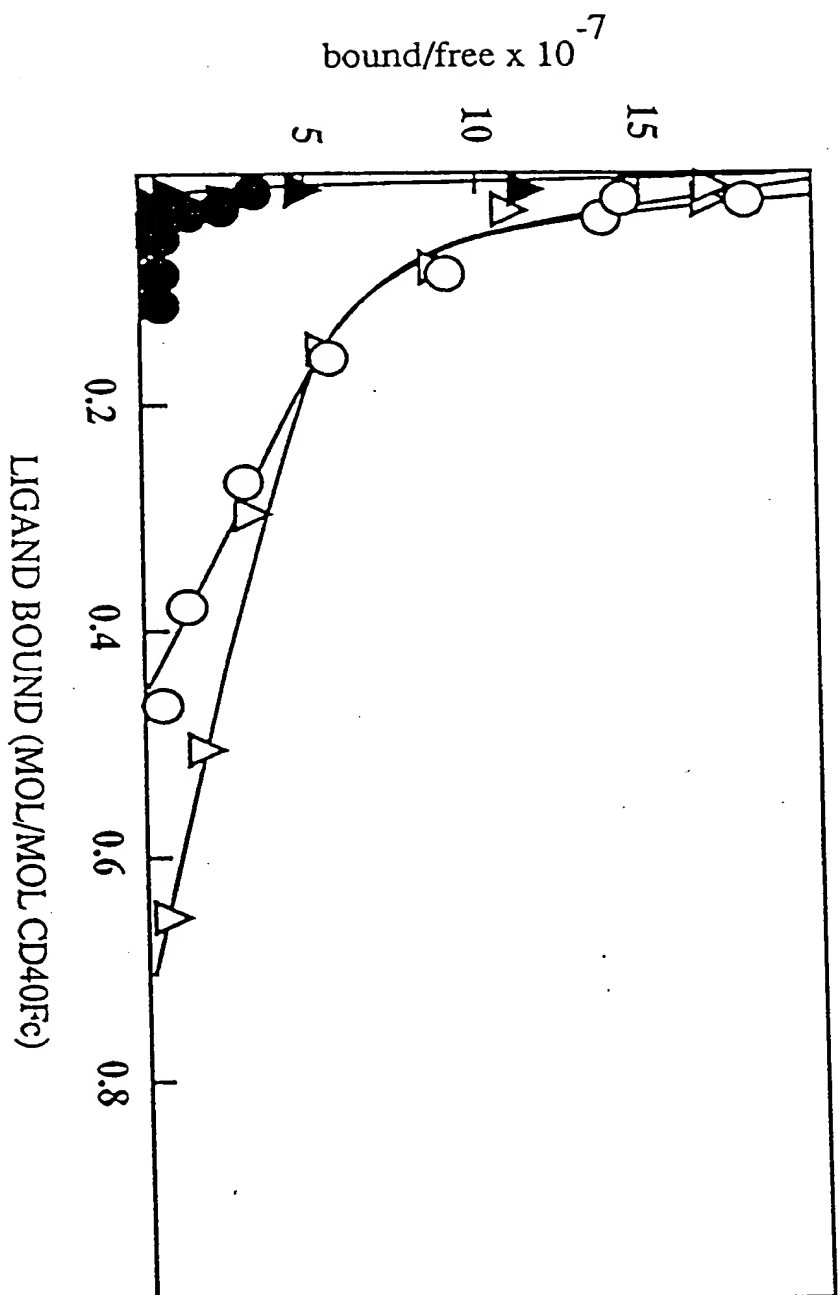


FIG. 18

FIG. 19A

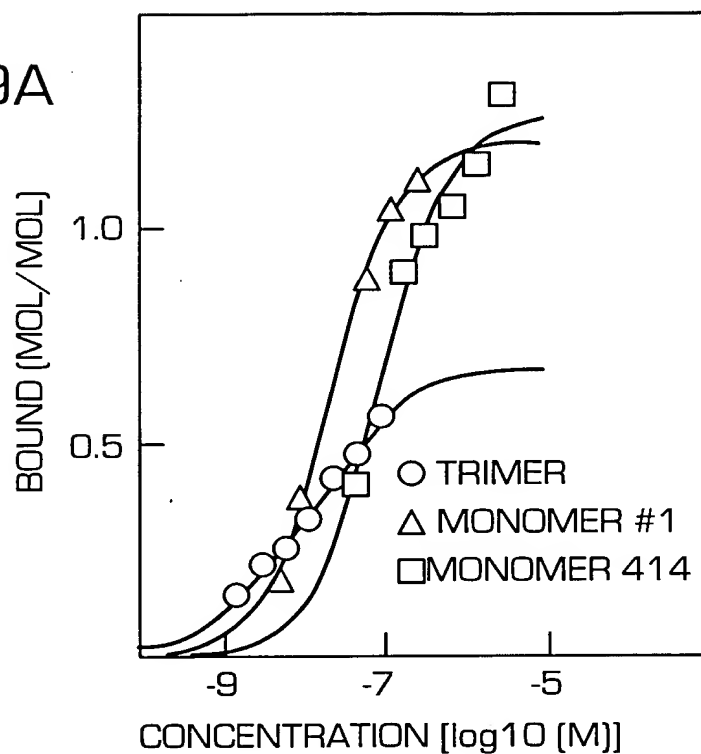
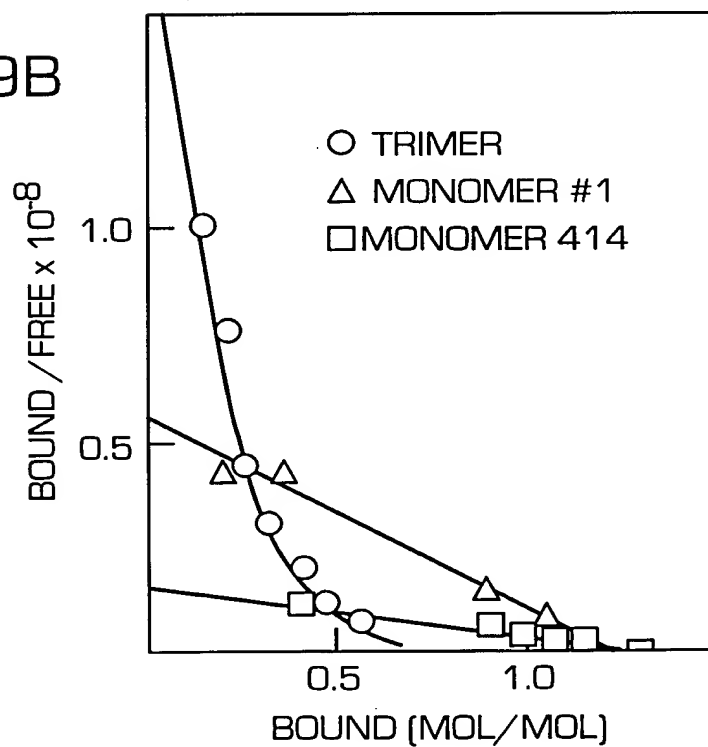


FIG. 19B



BINDING OF CD40 LIGANDS TO CD40Fc USING EQUILIBRIUM  
BINDING VALUES ESTIMATED FROM A KINETIC ANALYSIS  
OF THE ASSOCIATION PHASE